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FLEXIBLE INDEX STRIP

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This invention pertains to indexes, particularly to flexible index strips of a kind which may serve as the index to public records, for instance, such as grantor and grantee indexes in registries of deeds, or in telephone or street directories or the like, or in the preparation of such indexes, the present application being a continuation-in-part of the application for Letters Patent of the United States, Serial No. 438,845, filed June 23, 1954, by Garrison K. Hall, now abandoned. The invention relates more especially to a novel index element adapted to receive on its face a typed, stamped, or photographically impressed name, address or other indicia, and which is so devised that it may be hinged to similar elements to form a flexible strip or chain of any desired length capable of being fed through a typewriter, press, photographic apparatus or the like to facilitate the placing of the desired indicia on each element of the chain or the photographic reproduction of indicia already existing on said elements. The hinge connection between adjacent elements of the chain is such that any given element may be removed from the strip or chain without disturbing the sequence of other elements, for instance, for replacing an element carrying obsolete data with a fresh element carrying correct data, or one on which the data may be impressed. Such a flexible index strip or chain may be employed directly, the ready interchangeability of its constituent elements making it possible to keep it up to date, or where, in particular, the bulk of the strip of chain is excessive, it may be employed as the basis for preparing, by photographic technique, either full sized, microfilm, or microprint strips on thin and flexible material. Thus, at nominal cost, the indexes may be reissued daily in the form of microfilm or microprint for use with viewers, or at longer intervals filmed with a flat bed camera and enlarged to full size by wet or dry process, or reproduced by offset printing. They may also be used as a tamper-proof visible index that can be cleaned with a damp cloth.

One object of the invention is to provide a flexible index device comprising a plurality of index elements hinged together to form a flexible strip or chain of uniform thickness capable of being fed through a typewriter or other apparatus having strip advancing means, and wherein the several elements are so united as to permit any individual element to be removed without disturbing the sequence of the remaining elements.

According to the present invention, each individual index element comprises a main or body portion of generally rectangular contour in transverse section having approximately parallel relatively wide faces and narrow edges, one at least of the wide faces being smooth and designed to receive the desired indicia, and each element is provided with means whereby such element may be hinged to other like elements to form a chain or strip. In accordance with the invention (for providing such hinge connection between adjacent elements) each element has a retaining tongue or hinge pin projecting out from one of its narrow edges and a socket or hinge knuckle

in the opposite edge. The tongue and socket of each respective element are located between the planes of the opposite parallel faces of the element so that their presence does not increase the effective thickness of the chain of united elements nor produce protuberances which would interfere with the smooth advance movement of the chain through the apparatus with which it is employed. Desirably, the several index-bearing elements are of a hard, stiff, shape-retaining material desirably having such a degree of elasticity as to permit the projection or retaining tongue of one element to be snapped into or out of the socket of an adjacent element without damaging any of said parts, although it is contemplated that adjacent elements may be united or separated merely by sliding one endwise relatively to the other. In addition to the aforementioned characteristics, the material employed must be sufficiently tough, strong and durable to assure the continuity of the strip or chain of such elements while it is being moved through a typewriter or other device by appropriate feed mechanism, an operation which may require that the strip or chain of united elements be bent or flexed on an arc of rather small radius. While some of the more salient features, characteristics and advantages of the present invention have already been suggested, other and further objects and advantages will become apparent from the study of a preferred embodiment taken in conjunction with the accompanying drawings, in which

Fig. 1 is a fragmentary plan view showing a portion of a strip or chain composed of individual index elements according to the present invention, the index elements being shown as in the same plane;

Fig. 2 is a fragmentary end view, much enlarged, of a preferred form of element, showing the socket in one longitudinal edge of the element and the tongue at its opposite edge;

Fig. 3 is a fragmentary end view showing three adjacent elements of the series, to substantially the same scale as Fig. 2, with the tongue of one element engaging the socket of the next, the three elements being shown in alignment as in Fig. 1;

Fig. 4 is a view similar to Fig. 3, but illustrative of the flexibility of a chain of united elements;

Fig. 5 is a transverse section through an element similar to that of Fig. 2, but provided with a ply of paper or the like on that face which is intended to receive the indicia;

Fig. 6 is a view similar to Fig. 5, but showing the element provided with a film of photo-sensitive emulsion;

Fig. 7 is an end view, to large scale, showing an element of slightly modified form;

Fig. 8 is a plan view of a single element, such as that of Fig. 7, to smaller scale;

Fig. 9 is a fragmentary end view showing portions of two elements generally similar to that of Fig. 2, but having a socket and tongue of slightly different contour; and

Fig. 10 is a fragmentary diametrical section through the platen of a typewriter, to large scale, provided with ribs for engagement with grooves in the index elements of Figs. 1 to 6.

According to the present invention, and as shown in Fig. 1, the flexible index strip or chain S comprises a series of like index elements **1**, **1a**, **1b**, etc., hingedly connected together. Each individual index element **1**, **1a** etc. is an elongate generally rectangular strip of a durable, hard, shape-retaining and stiff material having a flat surface **2** (Fig. 2) designed to receive indicia. The opposite face **2a** is parallel to the face **2** and may likewise be flat and capable of receiving indicia, although in the preferred arrangement illustrated in Fig. 2 there is provided a groove G in the face **2a** which extends longitudinally of